

O'Neil, A.B. Are jr. high school boys more interested
in biography . . . ?
1947

BOSTON UNIVERSITY
SCHOOL OF EDUCATION

Ann Barbara O'Neil

ARE JUNIOR HIGH SCHOOL BOYS MORE INTERESTED
IN BIOGRAPHY THAN JUNIOR HIGH SCHOOL GIRLS?

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Thesis

ARE JUNIOR HIGH SCHOOL BOYS MORE INTERESTED IN BIOGRAPHY
THAN JUNIOR HIGH SCHOOL GIRLS?

Submitted by

Ann Barbara O'Neil

(A.B., University of New Hampshire, 1943)

In partial fulfillment of requirements for
the degree of Master of Education

1947

First Reader: Mr. Franklin C. Roberts, Professor of Education

Second Reader: Dr. John J. Mahoney, Professor of Education

Third Reader: Mr. William H. Cartwright, Assistant Professor of Education

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The writer wishes to acknowledge the assistance and cooperation given by Lawrence L. Brown of the Dedham School System which aided in the preparation and administration of the test used in the following thesis.

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by Dr. Thomas L. Brown of the British Museum Library.
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assistance in the preparation of the maps.

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CHAPTER I

THE AMERICAN BORN

CHAPTER I

THE PROBLEM AND METHOD OF PROCEDURE

A. The problem.--

This is a study to determine whether junior high school boys are more interested in biography than junior high school girls.

B. Significant facts to be uncovered.--

It is hoped that investigation will answer the following questions:

First-- Are junior high school boys more interested in biography than junior high school girls?

Second-- Do these interests in specific fields vary according to sex?

Third-- Do these interests in specific fields vary within each sex?

Fourth-- Is there a correlation between ability to achieve on the test and stated preferences for the social studies?

Fifth-- Do the stated preferences for any academic subjects account for any areas of success on the test?

C. Purpose of the study.--

The purpose of the study is two-fold:

First-- to satisfy the writer's curiosity as to whether boys are more interested in biography than junior high school girls

Second-- to help the writer to plan a more vital class program around such a difference and such a variety of interests if they do exist

CHAPTER I

THE PROBLEM AND METHOD OF RESEARCH

A. The problem
The problem of determining what is the best
way to improve the quality of food is one
of great interest in physiology and nutrition.

B. Simplifying terms to be used
The following terms will serve as follows:

First - The major high quality foods pose more interests in
going to be used in the diet.

Second - Do these interests in specific areas

Third - Do these interests in specific areas with
which affect the diet.

Fourth - Do these

Five - Is there a certain position
of the body which is comfortable?

Six - Do these interests in specific areas with
which affect the diet.

Seven - Do the interests in specific areas with
which affect the diet.

Eight - Do the interests in specific areas with
which affect the diet.

C. Purposes of the study

The purpose of the study is to determine
the best way to improve the quality of food
and to determine the best way to improve the
quality of food.

If this is done

D. Previous studies of a similar nature.. - -

To date no such survey report is available for study. However, several experimentalists have considered this difference in relation to social studies material. Among them was Arthur Reilley who, in an unpublished Boston University School of Education master's thesis, found that high school boys were more interested in politics than high school girls.

^{2/} L.C. Day using the following fields of interest; politics, economics, science, radio, popular literature, sports, movies, and crime, found that boys from grades VI--XII averaged two (2) points higher than girls from grades VI--XII.

E. Method of procedure.. - -

In order to decide whether junior high school boys are more interested in biography than junior high school girls, and also to answer the minor problems, the writer constructed and had administered an objective-type information test. The test consisted of one hundred (100) items. It was given to approximately four hundred fifty (450) junior high school boys and girls.

1/ Arthur G. Reilley, "Are High School Seniors Interested in Things Political?", unpublished Ed. M. Thesis, B.U. School of Education, 1936.

2/ L. C. Day, "Boys and Girls and Current Events", The Elementary School Journal (January, 1936), pp. 354-355.

3/ Douglas Webb, Measurement in Intensity, Henry Holt and Company, New York, 1931, p. 200.

4/ Ibid., p. 260

5/ Tolman East, Measurement in Psychology, Prentice-Hall, Incorporated, New York, 1936, pp. 107-108.

F. How can we measure interest? - -

Interests are most often classified in terms of the objects
^{1/} and activities from which one received satisfaction or pleasure.

Fryer further defines interests "as having both subjective and
^{2/} objective expression."

Hunt defines subjective interests as those "dependent upon feelings that accompany interest experiences." Objective interests, she explains, are "observable reactions to stimuli".
^{3/}

The chief methods now used to measure interests are:

1. inventories or questionnaires
2. rating scales
3. information tests
4. free association tests

The first two fall into the classification of subjective measurement. The writer is committed to the construction of an objective measuring instrument (p. 2). Therefore the choice lies between method three or method four. Method three was selected, because the writer felt that four did not lend itself to this type of research.

1. Information tests

It has become an accepted educational principle that knowledge and interest are closely associated.

^{1/} Douglas Fryer, Measurement of Interest. Henry Holt and Company. New York, 1931, p. 260.

^{2/} Ibid, p. 260

^{3/} Thelma Hunt, Measurement in Psychology. Prentice-Hall, Incorporated. New York, 1936, pp. 187-188.

New York, 1836, b. 590

Impressions made in New York by
the author of "The American Anti-Slavery Society's Appeal to the People of the United States."

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Burtt claims that "if a person is interested in a certain field he will pick up information about it Consequently an information test may give some indication of interest if the items are carefully selected."^{1/}

Although this position is attacked by some authorities, Fryer concludes his chapter on interests by stating, "The safest conclusion, as already stated, is that information tests measure information. But the theory persists that in achievement, as evidenced in the acquisition of information, there is present an effect of interests as well as abilities."^{2/}

In view of the above research the writer feels justified in claiming that interest, as related to the thesis problem can be determined by an information test.

G. The type of information test to be used. - -

The use of the so-called "new type" or objective test has been validated by several studies. Cory found that the essay examination and the new type test measure very nearly the same functions.

1/ H.E. Burt, "Measuring Interests Objectively", School and Society, (March, 1923), pp. 444-448.

2/ Douglas Fryer, The Measurement of Interest. Henry Holt and Company. New York, 1931, p. 290.

3/ S. Cory, "A correlation between New Type and Essay Examination Scores, and the Relationship between them and Intelligence as Measured by Army Alpha", School and Society, (December, 1930), pp. 849-950.

^{1/} Eurich found that if "Reliable tests are constructed any one of the four types used is probably as adequate as any one of the other three for measuring the amount of information which the members of the class have accumulated". Therefore the four have equal validity. The completion and multiple choice proved to be the most reliable according to his report.

Peters and Marty using school marks as a criterion found that multiple choice and completion tests were slightly more valid ^{2/} than the essay examination.

The findings of Brinkley, DeGraff and Ruch, Wood, Patterson, Langlie, and Charles are reported as follows by Ruch:

1. Where old-and new-type tests are compared, the new type are at least as valid as the traditional examination.
2. There is no reason to believe that the newer objective tests are impotent for the measuring and thought in contrast with memory for facts.
3. If recall tests are held to be valid (and there is no evidence to the contrary), recognition tests measure roughly the same abilities or functions.

^{1/} Alvin C. Eurich, "Four Types of Examinations compared and evaluated", Journal of Educational Psychology, (April 1931), pp. 268-278.

^{2/} Peters and Marty, "Educational Research and Statistics", School and Society, (March, 1931), pp. 336-338.

4. When validities are measured against school marks as a criterion, the correlations are lower than where long objective tests are used as the criterion of validity. Such a finding, however, is in line with the expectancy, since school marks are very unreliable and hence will not support high correlation.
5. When validity coefficients are corrected for attenuation the resulting values are high, showing that true-false, multiple choice, and recall tests measure roughly the same abilities.^{1/}
- In view of the contents of the above studies, and the knowledge of several more, the writer feels justified in using the objective type examination which will consist of a multiple choice part and a completion part.

H. The most valid type of multiple choice test. - -

Denney and Remmers report that there is an increase in reliability of multiple choice items with an increase in the number of response alternatives. This substantiates the Spearman-Brown Prophecy Formula.^{2/} Each test item on the biography test which is a multiple choice item will have three alternatives.

Vatow and Danforth found that the loss in validity was less when responses were made in this fashion () than when the examinee was required to transfer a number. This method suggested by Vatow

^{1/} G. M. Ruch, The Objective or New Type Examination. Scott, Foresman and Company. New York, 1929, p. 290.

^{2/} Denny and Remmers, "Relation of Multiple Choice Instruments as a Function of the Spearman - Brown Prophecy Formula II," Journal of Educational Psychology (December, 1940), pp. 699-704.

and Danforth will be used on the test constructed for this study.^{1/}

Greene, Jorgensen, and Gerberich suggest the following rules for constructing multiple choice items. The writer has attempted to follow them in the construction of each multiple choice item.

1. As much of the statement as possible should occur in the introductory portion.
2. Alternative answers should all be stated in correct grammatical style.
3. Incorrect alternatives, or confusions, should be plausible.
4. "A" or "an" should not ordinarily be used to introduce the alternative answers.
5. All items should ordinarily have the same number of alternative responses.
6. Alternatives should ordinarily occur at the end of the statement.
7. Answers should be required in a highly objective form.
8. Correct responses should be distributed with approximate equality among possible answer positions.
9. Random occurrence of correct responses should be employed.^{2/}

I. The most valid type of completion test. - -

Charles Bird found that single word completion (recall) type of questions rank highest in discrimination.^{3/}

^{1/}Vatow and Danforth, "The Effect of Methods of Response Upon the Validity of Multiple Choice Tests", Journal of Educational Psychology, (November, 1939), pp. 624-627.

^{2/}Greene, Jorgensen, and Gerberich, Measurement and Evaluation in the Secondary School. Longmans, Green and Company. New York, 1943, pp. 133-134.

^{3/}C. Bird, "The Comparative Validity of New Type Questions", Journal of Educational Psychology, (April, 1947) pp. 241-258

The majority of the completion items used in the test for this study require only one word to make the statement correct. The maximum number of words required to answer the items correctly is two.

Greene, Jorgenson, and Gerberich make these suggestions for constructing completion items:

1. Lines for responses should be of the same and of adequate length.
2. Desired responses should be definite.
3. Desired responses should be important.
4. Any correct answer should receive credit.
5. Spelling errors probably should not be penalized.
6. "A" or "an" should not immediately precede a blank.
7. Positions for responses should ordinarily be at the ends of the sentences.

The test has been constructed according to the preceding suggestions.

J. The criteria of a good test.

Greene, Jorgenson, and Gerberich have selected nine (9) standards for the evaluation of an examination.^{1/} The list embraces all of the principal criteria suggested by Ruch^{2/} and contains a few valuable additions.^{3/}

^{1/} Greene, Jorgenson, and Gerberich, Measurement and Evaluation in the Secondary School. Longmans, Greene and Company. New York, 1943, pp. 190-191.

^{2/} Ibid, p. 52

^{3/} G.M. Ruch, Objective or New Type Examinations. Scott, Foresman and Company. New York, 1929, p. 29.

The majority of the population are now too fat to find
enough food to live on only one supplementing diet. The
shorter periods of time of feeding the higher the percentage
maximum number of months required to obtain correction is

and

Greene, Tolosa, and Gelpi report that these adaptations to
concentrated nutrition differ:

J. Loss of responses should be sharp.

Tendency

S. Desirous responses should be definite.

E. Desirous responses should be impulsive.

T. There should be some desire to eat.

A. A desire for sweets should not be present.

R. Biting off toes happens especially when "A" or "E".

to above can be seen to be the result of the ability to eat.

V

the significance

The first few meal corrections before beginning

satisfactory

The diet is to strict to start.

-haste (S) until tolerance has developed and tolerance has (E) again.

Greene, Tolosa, and Gelpi report that the first emulsion is

used for the emulsion to be eliminated. The first emulsion is

used to the patient's taste by himself and contains a few

calories per tablespoon.

V Greene, Tolosa, and Gelpi, measurement has fasted on the

Secondaria Sodio, powdered Greene and Company, New York, 1912.

pp. 170-171.

S. Tidy & 25

3 G.W. Root, Objection to New Type Emulsions. Scott, Worcester and

Commission, New York, 1912, p. 33.

The criteria for judging a good examination are:

1. Validity as an essential characteristic of a good examination.
2. Curricular and statistical validity.
3. Reliability as an aspect of test validity.
4. Methods of determining and estimating test reliability
5. Dependence of test reliability upon objectivity and adequacy of sampling.
6. Administrability and scorability as test criteria.
7. Comparability important to the use of test results.
8. Economy as a necessary consideration.
9. Utility as a final overall criterion of a good examination.^{1/}

1. Validity.- -

According to Kelley validity determines whether a test measures what it purports to measure.^{2/} Ruch lists the principal methods of validating a test as:

1. By judgments of competent persons
2. By analysis of courses of study or textbooks.
3. By harmonizing with the recommendations of national committees or other recognized bodies on curricula, courses of study, minimum essentials, etc.

^{1/} Greene, Jorgenson, and Gerberich, Measurement and Evaluation in the Secondary School. Longman, Green and Company. New York, 1943, p. 52.

^{2/} Truman L. Kelley, The Interpretation of Educational Measurements. World Book Company. Yonkers-on-the-Hudson, New York, 1927, p. 14.

4. By experimental studies of social utility.
5. By studies of the most frequently recurring errors.
6. By computation of the percentages of pupils answering each item correctly at each successive age or grade level.
7. By correlation against an outside criterion.
8. By combinations of the above methods.

The last five (5) standards can only be utilized after the test has been administered. The judgment of competent persons has been received. The test was submitted as a portion of work for a research course at Boston University, and it was approved. One other university professor and a junior high school supervisor have studied the test, made suggestions to improve it, and have approved it.

In six areas of the test the questions were written after analyses of courses of study and textbooks. The other areas are not included in our school program as it is now organized.

It is impossible to establish statistical validity since neither school marks nor teacher-judgments were available to the writer.

2. Reliability.- -

Reliability, states, Kelley, is the determiner of how accurately a test measures the thing which it does measure.

1/ G. M. Ruch, Objective or New Type Examinations. Scott, Foresman, and Company. New York, 1929, p. 29.

2/ Truman L. Kelly, The Interpretation of Educational Measurements. World Book Company. Yonkers-on-the-Hudson, New York, 1927, p. 14.

The accepted means of guaranteeing reliability are: ~~the scoring~~

1. Objectivity of scoring or evaluating.
- ^{1/} 2. Character of the sampling included in the test items.
- ^{2/} 3. The number and distribution of the questions.

The scoring of the test constructed for this thesis is completely objective. ~~an equivalent or duplicate form is available.~~

The character of all the samplings was essentially the same, since each question called for identification of people prominent in the different fields. The sampling was wide since over ten areas of interest were sampled. ~~not related to the usual school class work.~~

Each of the ten areas is sampled by five (5) completion questions and by five (5) multiple choice questions. A total of one hundred (100) questions is an adequate sampling. ~~is a useful~~

3. Ease of administration and scoring. - -

~~the directions~~ The directions to the pupils were simple. Samples were given for each part to aid the students. No new test technique was employed. Every pupil tested previously had experiences with the two types of objective tests used. ~~and objectives~~

Standard directions were given to each teacher who administered the test. The exact copy of these directions is given on page of chapter II.

1/ G. M. Ruch, Objective or New Type Examinations. Scott, Foresman, and Company. New York, 1929, p. 42.

2/ Robert Ellis, Standardizing Teachers' Examinations and the Distribution by Class Marks. Public Schools Publishing Company. Bloomington, Illinois, 1927, p. 42.

A formboard key for the multiple choice items made the scoring process a simple and speedy operation. The one-word answers in the completion aided the scoring.

4. Comparability important to the use of test results.- -

Since the test was constructed for this thesis, no forms are available. No equivalent or duplicate form is available.

5. Economy as a necessary consideration.- -

The test is economical from the point of time requirement. The total time for administering the test is approximately forty (40) minutes, and so it is well adapted to the usual school class period.

6. Utility as a final overall criterion of a good examination.- -

The test has been found to measure the interests of junior high school boys and girls in biography, therefore it is a useful examination.

K. Determining interest in the social studies.- -

The testee will check subject preferences on the test cover.

The results of this personal check will be used to correlate test achievement and interest in the social studies.

CHAPTER II

11 SEPTEMBER

1944

CHAPTER II

THE TEST

A. The name of the test.- -

The name of the test is "An Interest Inventory Test". It is an objective type test of the multiple-choice and completion varieties.

B. The test cover.- -

1. Following the standard directions contained on page 21 of this thesis, the pupil filled in the cover by writing his name, the date he was tested, the school he attends, his grade (grade placement and division), the date of his birth, and his sex.
2. The five major academic subjects were listed in alphabetical order, with a parenthesis before each subject as follows:

() Arithmetic

() English

() Geography

() History

() Science

Following the directions, the pupil was asked to place the figure 1 in the parenthesis before the subject he liked best, to place the figure 2 before the subject which was his second choice, and to place the figure 3 before the subject which was his third choice.

3. Spaces were provided on the cover for the mathematical computations of the corrector. In the column labeled "number right",

the total of the questions correctly scored was placed for each separate test.

4. In the column marked "score", the total number of questions answered correctly for both parts was recorded for each test.
5. The total score for the entire test was noted at the bottom of the page in the proper square.
6. The percentile score was registered directly under the total score in a separate box which was labeled for that purpose.

C. Characteristics of the test.

1. Ten areas were sampled by the "Interest Inventory Test". They were:

1. sports
2. politics and government

D. The score

3. literature
4. science

5. military
6. radio
7. music
8. comics

E. Material

9. authors
10. actors

2. There were two (2) separate parts to the test. Part I was called "A Completion Test", and it was composed of the completion-type items. Part II was called "A Multiple Choice Test", and it was composed of multiple choice items.
3. The entire test contained one hundred (100) items. Each part

to heavily saw before visitors can get to Lake and
not damage trees

enough to reduce forest and "trees" before many get in
fact more and better saws are being used to keep
down the forest and the number of trees left is
now down to 1000 per acre in the proper areas.
The forest is being harvested selectively and
the lumber is being used for houses and other
purposes.

C. Characteristics of the "Upper Laurentian Tree".

The tree was very tall and slender by the "Upper Laurentian Tree".

more

adrogia 1

anemoneous has trifoliate

aristata 2

aralia 3

aryllium 2

other 3

circum 7

conica 8

cordata 2

cratatos 10

and I first saw off at string adragia (3) and then went to
the second saw to the "tree number A" behind
"tree number A" behind the II tree came a lot more
and the third saw to the right side of the "tree
number B" and (10) behind the last tree and the

was divided into ten (10) tests, each of which consisted of five (5) questions. The ten tests dealt with the ten areas listed above.

4. The areas were sampled by questions concerning people prominent in the ten (10) fields listed in Part C at the top of page
5. The completion test questions could be answered correctly by a maximum of two (2) words. This principle is in keeping with the findings recorded on Page 7 of Chapter I.
6. The multiple choice items consisted of three (3) response alternatives. They were marked as follows (✓). The parenthesis preceded the answer. These principles are in accord with the findings explained on Pages 6-7.
7. All responding was done in the test booklet.

D. The scoring.- -

Each item had a value of one (1) point. Therefore each part had a total value of fifty (50) points, and each separate test had a value of five (5) points. If Part I and Part II had been answered correctly, a total score of one hundred (100) points would have been attained.

E. Material used in the test questions.- -

1. Test I tested the ability to identify people prominent in sports. The following areas were tested: aviation, boxing, wrestling, baseball, football, prize fighting, and golf. The total sampling was divided as follows:

aviation	3	wrestling	1	football	1
boxing	1	baseball	2	golf	1
prize fighting	1				

to bataenco dñm to nose (01) nñc oñr behivib saw
azero nñc edt atlw tñch cñct nñc edt amaltesup (2) evit
evoda bataff

mentoring elqeq qñkñsoco amaltesup yd bataenco erew sñrto edt
egq to get edt da 3 pñsñ ni bataff ahleit (01) nñc edt ni
n yf vñtsermo berewans ed bñco amaltesup daet goñjelqmoa edt
atlw gñqeqni ni al elqioning sint abrow (3) awt to fumixam
I rñdgnos to 1 egq no bebtocer agñbñm edt
gñqeqni (4) erent to bataenco erew kolon elqitlum edt
ahedñmoxaq edt (5) emolloi za bebtocer erew verT zevitarrëls
edt atlw brocos ni era elqioning eseqñ. Berewans edt beheseq
1-2-3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-289-290-291-292-293-294-295-296-297-298-299-299-300-300-301-302-303-304-305-306-307-308-309-309-310-311-312-313-314-315-316-317-318-319-319-320-321-322-323-324-325-326-327-328-329-329-330-331-332-333-334-335-336-337-338-339-339-340-341-342-343-344-345-346-347-348-349-349-350-351-352-353-354-355-356-357-358-359-359-360-361-362-363-364-365-366-367-368-369-369-370-371-372-373-374-375-376-377-378-379-379-380-381-382-383-384-385-386-387-388-389-389-390-391-392-393-394-395-396-397-398-399-399-400-400-401-402-403-404-405-406-407-408-409-409-410-411-412-413-414-415-416-417-418-419-419-420-421-422-423-424-425-426-427-428-429-429-430-431-432-433-434-435-436-437-438-439-439-440-441-442-443-444-445-446-447-448-449-449-450-451-452-453-454-455-456-457-458-459-459-460-461-462-463-464-465-466-467-468-469-469-470-471-472-473-474-475-476-477-478-479-479-480-481-482-483-484-485-486-487-488-489-489-490-491-492-493-494-495-496-497-498-498-499-499-500-500-501-502-503-504-505-506-507-508-509-509-510-511-512-513-514-515-516-517-518-519-519-520-521-522-523-524-525-526-527-528-529-529-530-531-532-533-534-535-536-537-538-539-539-540-541-542-543-544-545-546-547-548-549-549-550-551-552-553-554-555-556-557-558-559-559-560-561-562-563-564-565-566-567-568-569-569-570-571-572-573-574-575-576-577-578-579-579-580-581-582-583-584-585-586-587-588-589-589-590-591-592-593-594-595-596-597-597-598-599-599-600-600-601-602-603-604-605-606-607-608-609-609-610-611-612-613-614-615-616-617-618-619-619-620-621-622-623-624-625-626-627-628-629-629-630-631-632-633-634-635-636-637-638-639-639-640-641-642-643-644-645-646-647-648-649-649-650-651-652-653-654-655-656-657-658-659-659-660-661-662-663-664-665-666-667-668-669-669-670-671-672-673-674-675-676-677-678-679-679-680-681-682-683-684-685-686-687-688-689-689-690-691-692-693-694-695-696-697-697-698-699-699-700-700-701-702-703-704-705-706-707-708-709-709-710-711-712-713-714-715-716-717-718-719-719-720-721-722-723-724-725-726-727-728-729-729-730-731-732-733-734-735-736-737-738-739-739-740-741-742-743-744-745-746-747-748-749-749-750-751-752-753-754-755-756-757-758-759-759-760-761-762-763-764-765-766-767-768-769-769-770-771-772-773-774-775-776-777-778-779-779-780-781-782-783-784-785-786-787-788-789-789-790-791-792-793-794-795-796-797-797-798-799-799-800-800-801-802-803-804-805-806-807-808-809-809-810-811-812-813-814-815-816-817-818-819-819-820-821-822-823-824-825-826-827-828-829-829-830-831-832-833-834-835-836-837-838-839-839-840-841-842-843-844-845-846-847-848-849-849-850-851-852-853-854-855-856-857-858-859-859-860-861-862-863-864-865-866-867-868-869-869-870-871-872-873-874-875-876-877-878-879-879-880-881-882-883-884-885-886-887-888-889-889-890-891-892-893-894-895-896-897-897-898-899-899-900-900-901-902-903-904-905-906-907-908-909-909-910-911-912-913-914-915-916-917-918-919-919-920-921-922-923-924-925-926-927-928-929-929-930-931-932-933-934-935-936-937-938-939-939-940-941-942-943-944-945-946-947-948-949-949-950-951-952-953-954-955-956-957-958-959-959-960-961-962-963-964-965-966-967-968-969-969-970-971-972-973-974-975-976-977-978-979-979-980-981-982-983-984-985-986-987-988-989-989-990-991-992-993-994-995-996-997-997-998-999-999-1000-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1089-1090-1091-1092-1093-1094-1095-1096-1096-1097-1098-1099-1099-1100-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1189-1190-1191-1192-1193-1194-1195-1196-1196-1197-1198-1199-1199-1200-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1219-1220-1221-1222-1223-1224-1225-1226-1227-1228-1229-1229-1230-1231-1232-1233-1234-1235-1236-1237-1238-1239-1239-1240-1241-1242-1243-1244-1245-1246-1247-1248-1249-1249-1250-1251-1252-1253-1254-1255-1256-1257-1258-1259-1259-1260-1261-1262-1263-1264-1265-1266-1267-1268-1269-1269-1270-1271-1272-1273-1274-1275-1276-1277-1278-1279-1279-1280-1281-1282-1283-1284-1285-1286-1287-1288-1289-1289-1290-1291-1292-1293-1294-1295-1296-1296-1297-1298-1299-1299-1300-1300-1301-1302-1303-1304-1305-1306-1307-1308-1309-1309-1310-1311-1312-1313-1314-1315-1316-1317-1318-1319-1319-1320-1321-1322-1323-1324-1325-1326-1327-1328-1329-1329-1330-1331-1332-1333-1334-1335-1336-1337-1338-1339-1339-1340-1341-1342-1343-1344-1345-1346-1347-1348-1349-1349-1350-1351-1352-1353-1354-1355-1356-1357-1358-1359-1359-1360-1361-1362-1363-1364-1365-1366-1367-1368-1369-1369-1370-1371-1372-1373-1374-1375-1376-1377-1378-1379-1379-1380-1381-1382-1383-1384-1385-1386-1387-1388-1389-1389-1390-1391-1392-1393-1394-1395-1396-1396-1397-1398-1399-1399-1400-1400-1401-1402-1403-1404-1405-1406-1407-1408-1409-1409-1410-1411-1412-1413-1414-1415-1416-1417-1418-1419-1419-1420-1421-1422-1423-1424-1425-1426-1427-1428-1429-1429-1430-1431-1432-1433-1434-1435-1436-1437-1438-1439-1439-1440-1441-1442-1443-1444-1445-1446-1447-1448-1449-1449-1450-1451-1452-1453-1454-1455-1456-1457-1458-1459-1459-1460-1461-1462-1463-1464-1465-1466-1467-1468-1469-1469-1470-1471-1472-1473-1474-1475-1476-1477-1478-1479-1479-1480-1481-1482-1483-1484-1485-1486-1487-1488-1489-1489-1490-1491-1492-1493-1494-1495-1496-1496-1497-1498-1499-1499-1500-1500-1501-1502-1503-1504-1505-1506-1507-1508-1509-1509-1510-1511-1512-1513-1514-1515-1516-1517-1518-1519-1519-1520-1521-1522-1523-1524-1525-1526-1527-1528-1529-1529-1530-1531-1532-1533-1534-1535-1536-1537-1538-1539-1539-1540-1541-1542-1543-1544-1545-1546-1547-1548-1549-1549-1550-1551-1552-1553-1554-1555-1556-1557-1558-1559-1559-1560-1561-1562-1563-1564-1565-1566-1567-1568-1569-1569-1570-1571-1572-1573-1574-1575-1576-1577-1578-1579-1579-1580-1581-1582-1583-1584-1585-1586-1587-1588-1589-1589-1590-1591-1592-1593-1594-1595-1596-1596-1597-1598-1599-1599-1600-1600-1601-1602-1603-1604-1605-1606-1607-1608-1609-1609-1610-1611-1612-1613-1614-1615-1616-1617-1618-1619-1619-1620-1621-1622-1623-1624-1625-1626-1627-1628-1629-1629-1630-1631-1632-1633-1634-1635-1636-1637-1638-1639-1639-1640-1641-1642-1643-1644-1645-1646-1647-1648-1649-1649-1650-1651-1652-1653-1654-1655-1656-1657-1658-1659-1659-1660-1661-1662-1663-1664-1665-1666-1667-1668-1669-1669-1670-1671-1672-1673-1674-1675-1676-1677-1678-1679-1679-1680-1681-1682-1683-1684-1685-1686-1687-1688-1689-1689-1690-1691-1692-1693-1694-1695-1696-1696-1697-1698-1699-1699-1700-1700-1701-1702-1703-1704-1705-1706-1707-1708-1709-1709-1710-1711-1712-1713-1714-1715-1716-1717-1718-1719-1719-1720-1721-1722-1723-1724-1725-1726-1727-1728-1729-1729-1730-1731-1732-1733-1734-1735-1736-1737-1738-1739-1739-1740-1741-1742-1743-1744-1745-1746-1747-1748-1749-1749-1750-1751-1752-1753-1754-1755-1756-1757-1758-1759-1759-1760-1761-1762-1763-1764-1765-1766-1767-1768-1769-1769-1770-1771-1772-1773-1774-1775-1776-1777-1778-1779-1779-1780-1781-1782-1783-1784-1785-1786-1787-1788-1789-1789-1790-1791-1792-1793-1794-1795-1796-1796-1797-1798-1799-1799-1800-1800-1801-1802-1803-1804-1805-1806-1807-1808-1809-1809-1810-1811-1812-1813-1814-1815-1816-1817-1818-1819-1819-1820-1821-1822-1823-1824-1825-1826-1827-1828-1829-1829-1830-1831-1832-1833-1834-1835-1836-1837-1838-1839-1839-1840-1841-1842-1843-1844-1845-1846-1847-1848-1849-1849-1850-1851-1852-1853-1854-1855-1856-1857-1858-1859-1859-1860-1861-1862-1863-1864-1865-1866-1867-1868-1869-1869-1870-1871-1872-1873-1874-1875-1876-1877-1878-1879-1879-1880-1881-1882-1883-1884-1885-1886-1887-1888-1889-1889-1890-1891-1892-1893-1894-1895-1896-1896-1897-1898-1899-1899-1900-1900-1901-1902-1903-1904-1905-1906-1907-1908-1909-1909-1910-1911-1912-1913-1914-1915-1916-1917-1918-1919-1919-1920-1921-1922-1923-1924-1925-1926-1927-1928-1929-1929-1930-1931-1932-1933-1934-1935-1936-1937-1938-1939-1939-1940-1941-1942-1943-1944-1945-1946-1947-1948-1949-1949-1950-1951-1952-1953-1954-1955-1956-1957-1958-1959-1959-1960-1961-1962-1963-1964-1965-1966-1967-1968-1969-1969-1970-1971-1972-1973-1974-1975-1976-1977-1978-1979-1979-1980-1981-1982-1983-1984-1985-1986-1987-1988-1989-1989-1990-1991-1992-1993-1994-1995-1996-1996-1997-1998-1999-1999-2000-2000-2001-2002-2003-2004-2005-2006-2007-2008-2009-2009-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2019-2020-2021-2022-2023-2024-2025-2026-2027-2028-2029-2029-2030-2031-2032-2033-2034-2035-2036-2037-2038-2039-2039-2040-2041-2042-2043-2044-2045-2046-2047-2048-2049-2049-2050-2051-2052-2053-2054-2055-2056-2057-2058-2059-2059-2060-2061-2062-2063-2064-2065-2066-2067-2068-2069-2069-2070-2071-2072-2073-2074-2075-2076-2077-2078-2079-2079-2080-2081-2082-2083-2084-2085-2086-2087-2088-2089-2089-2090-2091-2092-2093-2094-2095-2096-2096-2097-2098-2099-2099-2100-2100-2101-2102-2103-2104-2105-2106-2107-2108-2109-2109-2110-2111-2112-2113-2114-2115-2116-2117-2118-2119-2119-2120-2121-2122-2123-2124-2125-2126-2127-2128-2129-2129-2130-2131-2132-2133-2134-2135-2136-2137-2138-2139-2139-2140-2141-2142-2143-2144-2145-2146-2147-2148-2149-2149-2150-2151-2152-2153-2154-2155-2156-2157-2158-2159-2159-2160-2161-2162-2163-2164-2165-2166-2167-2168-2169-2169-2170-2171-2172-2173-2174-2175-2176-2177-2178-2179-2179-2180-2181-2182-2183-2184-2185-2186-2187-2188-2189-2189-2190-2191-2192-2193-2194-2195-2196-2196-2197-2198-2199-2199-2200-2200-2201-2202-2203-2204-2205-2206-2207-2208-2209-2209-2210-2211-2212-2213-2214-2215-2216-2217-2218-2219-2219-2220-2221-2222-2223-2224-2225-2226-2227-2228-2229-2229-2230-2231-2232-2233-2234-2235-2236-2237-2238-2239-2239-2240-2241-2242-2243-2244-2245-2246-2247-2248-2249-2249-2250-2251-2252-2253-2254-2255-2256-2257-2258-2259-2259-2260-2261-2262-2263-2264-2265-2266-2267-2268-2269-2269-2270-2271-2272-2273-2274-2275-2276-2277-2278-2279-2279-2280-2281-2282-2283-2284-2285-2286-2287-2288-2289-2289-2290-2291-2292-2293-2294-2295-2296-2296-2297-2298-2299-2299-2300-2300-2301-2302-2303-2304-2305-2306-2307-2308-2309-2309-2310-2311-2312-2313-2314-2315-2

Outstanding contemporary participants were selected for each of the seven areas used to test knowledge of sports. Two women and eight men were the correct answers.

2. Test II contained questions dealing with knowledge of politics and government. It was necessary to have an acquaintance with both domestic and foreign government in order to answer all of the questions correctly. Seven questions tested domestic and three questions tested foreign politics and government. The following components of domestic government were sampled: federal government, state government (Massachusetts), and city government (Boston).

The chief justice of the supreme court, presidential candidates, and cabinet members were included under federal government. The names of the governor and the lieutenant governor made up the state government items: the name of the mayor of the city of Boston was asked for. In order to test knowledge of foreign governments, the testee was asked to correctly identify the leaders of England, Russia, and China.

3. Test III measured knowledge of literature. Three measures of this knowledge were used: identifying titles, authors, and characters in literature. Seven (7) of the literary selections chosen for use in the test were taken from the Commonwealth of Massachusetts' State Certificate Reading List published in 1941 by the Division of Public Libraries of the Massachusetts Department of Education. A digest of the sources of items used is as follows:

NON-FICTION

FICTION

Grade VII level (as placed by the Mass. State Certificate List)	1	5
Grade VI level (as placed by the Mass. State Certificate List)	1	5
based on the curri- culum of the Ded- ham Public Schools prose	1	5
based on the curri- culum of the Ded- ham Public Schools poetry	1	5
extra-school reading	1	5

TOTALS 5 5

4. Test IV tested the ability to associate scientists with their inventions or contributions toward scientific progress. The names of scientists were selected from both science and history basic texts used in courses of study in the Dedham Public Schools. The following areas of scientific achievement were covered in the test: industrial machinery, electricity, human disease, photography, transportation, communication, plant life, and human anatomy. The sampling is divided as follows:

industrial machinery	1	communication	2
electricity	1	plant life	1
human disease	1	human anatomy	1
photography	1	transportation	2
TOTALS	<u>4</u>		<u>6</u>

5. Test V contained the names of men prominent in military life.

The leaders in all wars prior to World War II were selected from history basic texts used in the Dedham Public Schools. Leaders from the following wars were used in the questions: the American Revolution, the American Civil War, and World War II. It is very possible that there is an over-loading in the area of World War II and a glaring oversight of World War I.

The distribution of questions is as follows:

American Revolution	3
---------------------	---

Civil War	2
-----------	---

World War II	5
--------------	---

TOTAL	10
-------	----

6. Test VI tested radio as a field. The names of radio teams, radio families, and individual performers were used. The National Broadcasting Company in August of 1946, included five (5) of the programs which were included in the test as rating among the ten (10) leading radio programs on the basis of a nation-wide survey.

7. Test VII measured music. Six (6) of the ten (10) items dealt with contemporary musicians. Five (5) performers and five (5) composers are asked for. The following distribution is found by types of music:

	Popular	Semi-classical	Classical
<u>Composers</u>	1	3	1
<u>Performers</u>	2	3	
	<u>3</u>	<u>6</u>	<u>1</u>

8. Test VIII measured knowledge of the comics. Nine of the test items require the names of the characters in the comics. One question calls for knowledge of a character's occupation. One hundred and four (104) pupils in the junior high schools in Dedham made the following selection when asked to check the Boston newspaper in which they followed the comics regularly:

Record American-	-	48
Herald Traveler-	-	41
Globe-	-	12
Post	-	3
TOTAL		<u>104</u>

On the basis of this poll, the writer felt justified in allotting the question on the comics on the following basis:

Record American-	-	5
Herald Traveler-	-	4
Globe-	-	1
TOTAL		<u>10</u>

9. Test IX consisted of authors. Nine of the questions required the ability to identify the author with one of his works, and one question asked for the real name of an author who used a pen-name. Four of the items included authors who were mentioned in the 1941 State Certificate Reading List which is published by the Division of Public Libraries of the Massachusetts Department of Education. On the basis of origin of selection, the questions can be listed as follows:

~~Let us fall in FICTION~~ ~~and on the cover a NON-FICTION~~

Grade level VIII-IX (as placed by the Mass. State Certificate List)	1	
Grade VII level (as placed by the Mass. State Certificate List)	1	
Grade VI level (as placed by the Mass. State Certificate List)	1	
based on the curri- culum of the Ded- ham Public Schools poetry	2	
based on the curri- culum of the Ded- ham Public Schools prose	1	
current literature	2	
TOTALS	<u>3</u>	<u>2</u>
		<u>4</u>

10. Test X measured actors and actresses. All at one time or another played in the movies. Seven questions called for the names of male performers, and two called for the names of female performers. One question asked for the surname of a famous theatre family.

F. The directions--

In order to achieve a measure of standardization directions for administering were supplied to each teacher who acted as tester.

The exact copy of the directions is as follows:

"We are going to give you a test having two parts. You will take Part I now. This is a completion test and calls for one word to complete a statement and make it correct.

Let us fill in the heading on the cover of the test booklet.

Write your name, today's date, and the name of your school, grade, date of birth. Where it is typed 'boy or girl', indicate 'B' if you are a boy, 'G' if you are a girl. Read the names of the five subjects listed on the cover and select the three you like best in the order of their importance to you.

The first test contains fifty questions. You may not think you know all the answers, but try them all and do the best you can. Try to get as many right as possible. Do not spend too much time on any one question. If a question troubles you, move on to the next, and if time remains at the end, come back and do those you may have omitted. You will have fifteen minutes in which to work once the signal is given".

(Teachers will read aloud with the children the general directions at the beginning of Part I and complete the samples with the class.)

Then say, "Ready . . . Go!". Allow the children fifteen minutes, at the end of which time say, "Stop! Lay your pencils down and listen for directions for Part II. The second part is called a Multiple Choice Test. In this test there are three possible answers given to each question. You are supposed to select the correct answer from the three. As with the first part you will have fifteen minutes in which to work once the signal to begin is given".

(The teacher will read aloud with her class the directions for Part II and work out the sample with the class.)

Then say, Ready . . . Go!" At the conclusion of fifteen minutes say, "Stop. Lay your pencil down".

G. The time element.--

The pupils were given fifteen minutes to work each part. The time proved adequate for the completion part and excessive for the multiple choice section.

H. The sampling.--

The aim of the writer was to test all of the pupils enrolled in the junior high schools of Dedham, Massachusetts and in the junior high school of Westwood, Massachusetts.

I. Reproducing the test.--

Eight (8) stencils were cut to reproduce the test. The pages were mimeographed and then stapled together.

J. Typographical errors.--

Page V, section VI, question 4, should have read as follows:

4. The new star of Fred Allen's program is

() Senator McDuffy () Senator Claghorne () Senator Armstrong

K. Adjustments necessary.--

Question 3 on Page IV in Section II had to be rewritten for those who took the test in February. It was rewritten to read:

4. A former secretary of the United States was

() Chester Bowles () James Byrnes () Robert Hannegan

several months ago and the "big . . . years ago must

"now I am doing well again".

and so, the composition of animals used in this study is not

entirely self explanatory but fine gold dust and the suitable densities

of certain species also

set off the Florida sample and in this case we decided not to mix our

gold cohort with the circumstantial matched to it other data points.

Geographical coverage is roughly

as follows:

area covered by trees both northern and southern elements (A) their

members belonging to this being typical

of eastern United States

coastal plain plains of southern US ranges, E. egif

et coryne, *stellaria* here to tide over, and

southern woods (B) circumstantial coverage (C) various regions (D)

geographical distribution

related to locality of DNA in genome of *C. virginicus* collected

from 10 locations over 31 years at least 1000 or

more adult female *C. virginicus* sampled in

geographic spread (E) various parts (F) habitat selected (G)

GENUS *BORGIA*

AN INTEREST INVENTORY TEST

NAME _____

DATE _____

SCHOOL _____

GRADE _____

DATE of BIRTH _____

BOY or GIRL _____

() Arithmetic

() English

() Geography

() History

() Science

Put the number 1 before the subject you like best.

Put the number 2 before the subject which is your second choice.

Put the number 3 before the subject which is your third choice.

PART I

	number	right	score
TEST I			
TEST II			
TEST III			
TEST IV			
TEST V			

	number	right	score
TEST VI			
TEST VII			
TEST VIII			
TEST IX			
TEST X			

PART II

	number	right	score
TEST I			
TEST II			
TEST III			
TEST IV			
TEST V			

	number	right	score
TEST VI			
TEST VII			
TEST VIII			
TEST IX			
TEST X			

TOTAL SCORE

PERCENTILE SCORE

PAGE I
PART I--A COMPLETION TEST

DIRECTIONS: COMPLETE THE FOLLOWING STATEMENTS SO THAT THEY WILL BE TRUE.
IN ORDER TO HAVE YOUR ANSWER RIGHT, IT WILL BE NECESSARY TO
WRITE THE LAST NAME.

SAMPLES: 0. The president of the United States is _____.
00. The King of England is _____.

I. SPORTS

1. The first woman to fly the Atlantic Ocean was _____.
2. The First aviator to circle the North Pole was _____.
3. _____ a colored prize fighter, toured army camps to help morale.
4. The Red Sox prize first baseman for the 1946 series was _____.
5. West Point's famous football combination is Blanchard and _____.

II. POLITICS and GOVERNMENT

1. The chief justice of the United States is _____.
2. The present governor of Massachusetts is _____.
3. The mayor of the city of Boston is _____.
4. The head of the Russian government is _____.
5. The present lieutenant governor of Massachusetts is _____.

III. LITERATURE

1. The tales of King Arthur and his knights are called _____.
2. Jo and Beth are important characters in _____.
3. Bob Crachitt's son's name is _____.
4. The name of Rip Van Winkle's dog was _____.
5. The Gettysburg address was written by _____.

IV. SCIENCE

1. The inventor of the cotton gin was _____.
2. Among the early experimentors on the airplane were the _____ brothers.
3. An early American who experimented on the lightning rod was _____.
4. The inventor of the wireless was _____.
5. The first scientist to show that blood circulated through the heart was _____.

TESTIMONY OF T-boat
TESTIMONY A-1 (A)

NOTICE IS HEREBY GIVEN TO THE PUBLIC, ORGANIZATIONS, INSTITUTIONS, COMMUNITIES
OR VILLAGES IN THE STATE OF ALASKA THAT DUE TO THE LOSS OF
THE T-BOAT "T-1" AND THE DEATH OF THE CREW, THE T-BOAT IS
NO LONGER CAPABLE OF BEING USED FOR COMMERCIAL FISHING OR
TO TRANSPORT PERSONNEL OR MATERIALS.

REASON

The crew of the T-boat "T-1" were unable to maintain the
boat after it was struck by a large wave which
caused the boat to capsize, resulting in the loss of
the entire crew. The boat was not seaworthy due to damage to the
bottom and hull, which made it difficult to maintain.
The boat was carrying 12
people at the time of the accident, and all
of them were able to escape safely. The boat
was carrying 12 people at the time of the
accident, and all of them were able to escape safely.
The boat was carrying 12 people at the time of the
accident, and all of them were able to escape safely.

REASON

The boat was damaged by a large wave and the water level
was very high, causing the boat to capsize. The boat
was carrying 12 people at the time of the accident,
and all of them were able to escape safely. The boat
was carrying 12 people at the time of the accident,
and all of them were able to escape safely.

REASON

The boat was damaged by a large wave and the water level
was very high, causing the boat to capsize. The boat
was carrying 12 people at the time of the accident,
and all of them were able to escape safely. The boat
was carrying 12 people at the time of the accident,
and all of them were able to escape safely.

V. MILITARY

1. The general who was called "blood and guts" _____.
 2. The commander-in-chief during the American Revolution was _____.
 3. The famous American traitor of the Revolution was _____.
 4. The man who said "I shall return" was _____.
 5. The American general who forced the Germans to sign peace terms was _____.
- *****

VI. RADIO

1. Fred Allen's partner is _____.
 2. Edgar Bergen's radio partner is _____.
 3. The "All American Boy" on the radio is _____.
 4. The quiz master who chooses contestants from audiences to answer questions is _____.
 5. The name of the family in "One Man's Family" is _____.
- *****

VII MUSIC

1. The beloved orchestra leader who lost his life in World War II was _____.
 2. The name of the "Blind Whistler" is _____.
 3. The author of the music to "America" was _____.
 4. _____ is known as the "Waltz King".
 5. _____ was the original author of "Polanaise".
- *****

VIII COMICS

1. The sailor in the comics who eats spinach is _____.
 2. The girl in the comics who owns Sandy is _____.
 3. Jane Arden earns her living by being a _____.
 4. The name of Andy Gump's wife is _____.
 5. The name of Skeezip's wife is _____.
- *****

"*After the flood*" before our own forces left
our position remained with us until the morning of
the 26th when we moved out to assist our troops at
the "Prater Haid" also our name for
the general area of the border where we fought our

SECTION III

SECTION IV

at rendering battle here
at various other strategic points
at least one "you cannot kill" out
of each group of Germans here succeeded only when shot out

at "Pillar street end" in front of our out
positions, positions

SECTION V

now II and III now still and each with several battalions involved out
at "Hilfslinie bridge" out to cover out
and "salient" of same out to hold out
"Pillar street" out to cover out
"Prater Haid" to hold our tanks out now

SECTION VI

at Dominic who was engaged out to hold out
at "Pillar street end" out to hold out
a group of tanks and horses were out
at "Pillar street end" to hold out
at "Prater Haid" to hold out

IX. AUTHORS

1. The author of "To a Waterfowl" is _____.
2. The author of Tom Sawyer is _____.
3. The author of Rip van Winkle is _____.
4. The author of these famous words "give me liberty or give me death" was _____.
5. The author of Alice in Wonderland was _____.

X. ACTORS

1. The actor who plays Judge Hardy in the movies is _____.
2. Olivia de Haviland's sister is _____.
3. The actor who plays Tarzan is _____.
4. Representatives of a famous theatre family are Ethel, John, and Lionel _____.
5. _____ played the lead in "Going My Way".

PART II A MULTIPLE CHOICE TEST

DIRECTIONS:

PLACE A CHECK IN THE PARENTHESES BEFORE THE CORRECT ANSWER.

SAMPLE:

0. The first president of the United States was
 Jackson Madison Washington

I SPORTS

1. A former heavy weight champion was
 Jack Sharkey Earle Sande Gus Sonnenberg
2. A women's champion golf player is
 Alice Marble Patty Berg Sarah Fabyan
3. The pilot of the "Sunshine" who flew the wrong way was
 Don Corrigan Ralph Gudahl Don Lash
4. A great homerun king is
 Hank Greenberg Pat Dengis Charles Adams
5. The king of the ~~wrestlers~~ was
 Jack Sharkey Gus Sonnenberg Joe Louis
- *****

II POLITICS and GOVERNMENT

1. The candidate who ran against the late President Roosevelt in the last election was
 Wendell Willkie Harry Truman Thomas Dewey
2. The present prime minister of England is
 Churchill Atlee Beaverbrook
3. The secretary of state of the United States ~~was~~
 Chester Bowles James Byrnes Robert Hannegan
4. The president of China is
 Chiang Kai-shek Hirohito Gandhi
5. The secretary of labor is
 Perkins Swellenbach Baruch
- *****

III LITERATURE

1. Sir Gawain was a knight in
 Stories of King Arthur Quest of the Cavalier
 Golden Knight
2. Huckleberry Finn is a character in
 The Prince and the Pauper The Adventures of Tom Sawyer
 Roughing It
3. The man with the wooden leg in Treasure Island was
 Dave Bill John

LITERATURE CONTINUED

4. A famous outlaw was
 Jessie James Buffalo Bill Bill Cody
5. "'Twas the nineteenth of April in '75" describes the ride of
 Braddock Dawes Revere

IV SCIENCE

1. The man who found that yellow fever was caused by a mosquito was
 Dr. Reed Dr. Dick Dr. Black
2. The inventor of the modern camera was
 Eastman Kodak Bell
3. The inventor of the steamboat was
 Marconi Morse Fulton
4. A naturalist who worked on the potato was
 Pasteur Watt Burbank
5. The inventor of the phonograph was
 Stevens Bell Edison
- *****

V MILITARY

1. The American officer who signed the Japanese peace terms was
 MacArthur Eisenhower Patton
2. A famous naval hero of this war is
 Spatz Nimitz Eisenhower
3. A great southern general in the Civil War was
 Lee McClellan Hooker
4. The general who accepted the South's surrender was
 Grant Lee Sheridan
5. The naval hero of the Revolution was
 Washington Prescott Jones
- *****

VI RADIO

1. The radio comedian who plays the violin is
 Bob Burns Jack Benny George Burns
2. Fibber McGee's partner is
 Mary Molly Martha
3. The originator of the famous radio amateur shows was
 Major Bowes Dr. Christian Kay Kyser
4. The new star of Fred Allen's program is
 Senator McDuffy Senator Caghorne Sen. Armstrong

RADIO CONTINUED

5. The "professor" on Bob Hope's program is
 () Jerry Colona () Jerry Stafford () Hal Ennis

VII MUSIC

1. The author of "White Christmas" is
 () Perry Como () Fred Waring () Irving Berlin
 2. A renowned violinist is
 () Kreisler () Schuman () Waring
 3. A spectacular drummer is
 () Goodman () Krupa () Shaw
 4. The leader of the All Girl Orchestra is
 () McCormack () Spitalny () Kostelanetz
 5. The author of the Star Spangled Banner was
 () Francis Smith () Francis Key () James Madison

VIII COMICS

1. Junior helps
 () Winnie Winkle () Dick Tracy () Smitty
 2. Two famous comic kids are
 () Katzenjammers () Gumps () Jeffs
 3. In "Bringing Up Father" father's name is
 () Gus () Mac () Jiggs
 4. The girl who accompanies Flash Gordon on his expeditions is
 () Dale () Tillie () Ann
 5. Dagwood's son's name is
 () Alexander () Cookie () Richard

IX AUTHORS

1. The author of Kidnapped was
 () O. Henry () Stevenson () Kipling
 2. The author of "Snowbound" is
 () Whittier () Holmes () Coleridge
 3. The pen name of William Sydney Porter is
 () Walt Whitman () Mark Twain () O. Henry
 4. One of our best loved war correspondents was
 () Ernest Hemmingway () Gabriel Heatter () Ernie Pyle
 5. The author of I Never Left Home was
 () Zane Grey () Bob Hope () Joe E. Brown

X ACTORS

1. The portrayer of Abraham Lincoln was
 Robert Sherwood Cary Grant Humphrey Bogart
2. The actor who plays the Thin Man in the movies is
 William Powell Charles Boyer Fred Astaire
3. A cowboy actor is
 Russ Morgan Jean Hersholt Gene Autrey
4. Dr. Kildaire is played by
 Herbert Marshall Lionel Barrymore Robert Young
5. The "grand old lady of the movies" was
 Edna Mae Oliver Ethel Barrymore Billie Burke

CHAPTER III

JUNIOR HIGH SCHOOL STUDENT ATTITUDES

A. Introduction.—

This investigation was born natural to determine whether junior high school boys are more interested in bicycling than junior high school girls. The four main questions which were presented in chapter I are:

1. Do boys interests in specific fields vary according to sex?
2. Do these interests in specific fields vary with age and sex?
3. Is there a correlation between ability to achieve on the test and stated preferences for the actual students.
4. Do the stated preferences for my students subjects answer for any areas of interest on the test?

CHAPTER III

An analysis of the test results in relation to the major problem and minor problems will follow.

B. Participating schools.—

Six junior high schools cooperated in this investigation. Five of the junior high schools are located in the town of Leominster, Massachusetts. They are organized under a supervisory principal, and all the junior high schools have similar courses of study and textbooks.

The sixth junior high school is located in the town of New Salem, Massachusetts. The town of New Salem is adjacent to the town of Leominster.

In both towns the junior high schools combine grades seven and eight (7-8). Bimagnetic grouping is not practiced.

CHAPTER III

CHAPTER III

THE TEST RESULTS

A. Introduction.- -

This investigation has been carried on to determine whether junior high school boys are more interested in biography than junior high school girls. The four minor problems which were presented in Chapter I are:

1. Do these interests in specific fields vary according to sex?
2. Do these interests in specific fields vary with each sex?
3. Is there a correlation between ability to achieve on the test and stated preferences for the social studies?
4. Do the stated preferences for any academic subjects account for any areas of success on the test?

An analysis of the test results in relation to the major problem and minor problems will follow.

B. Participating schools.- -

Six junior high schools cooperated in this investigation. Five of the junior high schools are located in the town of Dedham, Massachusetts. They are organized under a supervisory principal, and all the junior high schools have similar courses of study and textbooks.

The sixth junior high school is located in the town of Westwood, Massachusetts. The town of Westwood is adjacent to the town of Dedham.

In both towns the junior high schools constitute grades seven and eight (7-8). Homogeneous grouping is not practiced in all of

CHAPTER III

THE TEST RESULTS

A. Implications

This investigation has been undertaken with reference to no better need than to gain a more comprehensive knowledge of the minor high school boys who are more interested in sports than in studies. The two minor high school boys were presented in Chapter I are:

1. Do these interests in sports interfere with school work?
2. Do these interests in sports interfere with work in other subjects?
3. Is there a correlation between the time spent by the students for the various sports and the time spent by them for their studies?
4. Do the students have access to the facilities for the various sports?
5. Do the students have access to the facilities for the various sports?
6. Is there a correlation between the time spent by the students for the various sports and the time spent by them for their studies?

B. Preliminary Conclusions

Six minor high school boys cooperated in this investigation. Two of the boys are from the Deaf school, Inc., being members of the American Association for the Deaf. The other four are from the public schools of the city of Memphis.

The six minor high school boys form the group of Deaf school boys from the Deaf school, Inc., Memphis. The four from the public schools are from the Memphis High School, Memphis.

In point of view of the minor high school boys' conceptions of grades seven to ten in respect to the present situation, the following is the result:

the junior high schools, therefore it was not possible to compare test results with division placements. With the exception of absentees the test was administered to all the pupils in the six junior high schools.

C. The time the test was given.- -

The test was given in the five junior high schools in Dedham in December of 1946. It was given in the sixth junior high school, in Westwood, in February of 1947.

D. Number of pupils tested.- -

The number of girls tested did not equal the number of boys, due to an uneven distribution in the school population. The total number of pupils tested is presented as follows:

	BOYS	GIRLS
Dedham	215	156
Westwood	51	42
—	—	—
TOTALS	261	198

TOTAL NUMBER TESTED-459

E. The total test results.- -

1. the frequency distribution of the total test was:

3. A tally of correctness for subjects tested follows:

SUBJECT TESTED	0	1	2	3	4	5	6	7	8-9	10
<hr/>										
Arith.	11	27	52	49	44	79	51	66	37	43
Spelling	5	11	41	61	75	77	69	44	42	23
History	17	7	22	56	81	43	62	17	13	5
Science	6	17	30	79	79	72	45	35	34	2

eruqoco et alidaco don asw si exoleens , afloods mahn toint edt
to moidoexa erd ditiW . zatnemelg boizivit ditiW zatnemelg
xis edt ni alidac edt lls ot beretainimba asw fad edt eassusada
afloods dyid toint

-- nevin asw fad eni suit edt .

ni ushbed al alidaco dild toint svli eni ni nevin asw fad alit
ni , loonos rigid toint svli edt ni nevin asw fad . If was
Decomper ot Jap .

• svli ni lepidet ni japp .

-- hafed alidq to hump .

urb ayed in redura eni lups don bib hafes alidq to hump .

Itot eni moidaingq loonos edt ni moidaingq levensi as of
mwoffol as bejneseq al hafed alidq to hump

ALIDCO	AFLOODS	
der	RS	maribed
si	RS	boowseh
—	—	—
ser	RS	JATOT

RS=REACTOR JATOT

-- alidco fad Itot edt .

;asw fad Itot edt ni moidaingq levensi as of .

Integral limits	Real limits	Mid-point	f	d	fd	fd^2
84-88	83.5-88.5	86	1	9	9	81
79-83	78.5-83.5	81	5	8	40	320
74-78	73.5-78.5	76	13	7	91	637
69-73	68.5-73.5	71	16	6	96	576
64-68	63.5-68.5	65	39	5	195	975
59-63	58.5-63.5	61	41	4	164	656
54-58	53.5-58.5	56	43	3	129	387
49-53	48.5-53.5	51	46	2	92	184
44-48	43.5-48.5	46	59	1	59	59
39-43	38.5-43.5	41	49	0	0	0
34-38	33.5-38.5	36	62	-1	-62	62
29-33	28.5-33.5	31	37	-2	-74	148
24-28	23.5-28.5	26	30	-3	-90	270
19-23	18.5-23.5	21	12	-4	-48	192
14-18	13.5-18.5	16	3	-5	-15	75
9-13	8.5-13.5	11	3	-6	-18	108
TOTALS			459	24	568	2920

2. The following measures of average, variability, reliability,

and deviation were found:

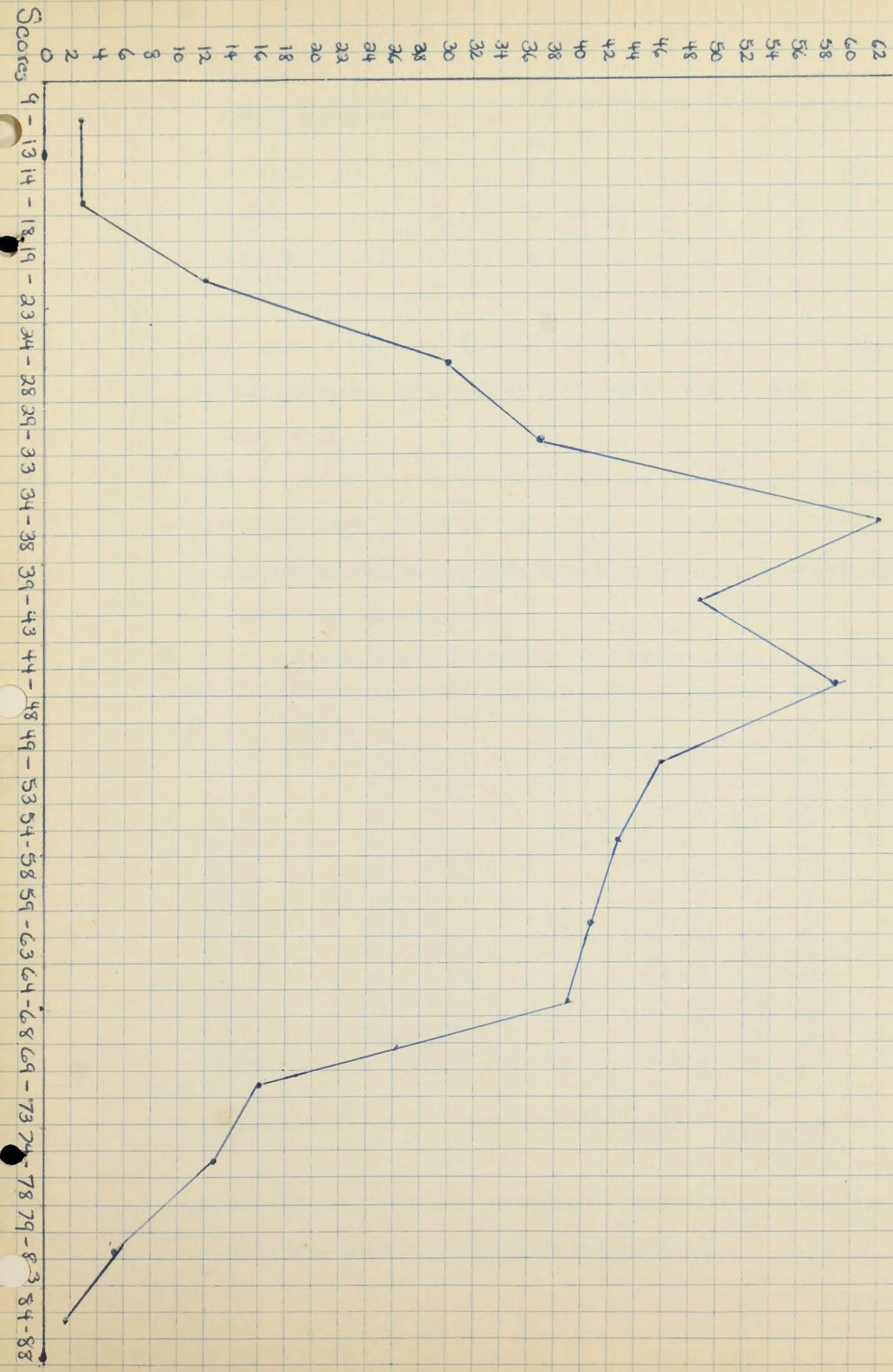
- a. arithmetic mean 45.80
- b. median 47.10
- c. range 79
- d. quartile deviation 14.27
- e. upper quartile 62.51
- f. lower quartile 33.97
- g. standard deviation 16.95

3. A tally of correctness for each area tested follows:

NUMBER RIGHT	0	1	2	3	4	5	6	7	8	9	10
<i>Areas</i>											
Sports	11	27	52	63	64	79	51	60	37	13	2
Politics	5	11	41	61	78	72	60	66	42	21	2
Literature	7	7	22	66	81	93	88	64	19	13	4
Science	6	17	38	70	79	79	72	48	33	14	3

A Graph of the Frequency Distribution by Class Intervals

Frequency



NUMBER RIGHT	0	1	2	3	4	5	6	7	8	9	10
Military	6	21	47	70	69	56	42	49	38	36	25
Radio	4	12	39	73	71	60	68	57	41	21	3
Music	32	67	109	101	78	33	25	17	4	3	0
Comics	2	9	12	19	49	60	95	101	72	32	8
Authors	17	37	78	98	101	59	40	20	5	4	0
Actors	2	23	44	62	89	98	77	48	12	3	1

4. A graph of the total test is included on the preceding page.

5. Interpretation of the total test results will be made in
Chapter IV.

F. The test results as they relate to problem I - The Major Problem. --

1. Problem I was stated as follows:

Are junior high school boys more interested in biography than
junior high school girls?

2. The total frequency distribution of boys' scores is as follows:

Integral limits	Real limits	Mid-point	f	d	fd	fd ²
78-82	77.5-82.5	80	3	7	21	147
73-77	72.5-77.5	75	8	6	48	288
68-72	67.5-72.5	70	9	5	45	225
63-67	62.5-67.5	65	28	4	112	448
58-62	57.5-62.5	60	36	3	98	324
53-57	52.5-57.5	55	19	2	38	76
48-52	47.5-52.5	50	30	1	30	30
43-47	42.5-47.5	45	31	0	0	0
38-42	37.5-42.5	40	28	-1	-28	28
33-37	32.5-37.5	35	26	-2	-52	104
28-32	27.5-32.5	30	22	-3	-66	198
23-27	22.5-27.5	25	10	-4	-40	160
18-22	17.5-22.5	20	7	-5	-35	175
13-17	12.5-17.5	15	1	-6	-6	36
8-12	7.5-12.5	10	3	-7	-21	147

TOTALS

261

144 2,386

3. The following measures of average, variability, reliability,
and deviation were found for the boys:

a. arithmetic mean	47.75
b. median	47.90
c. range	73
d. quartile deviation	11.68
e. upper quartile	60.1
f. lower quartile	36.75
g. standard deviation	15.80

4. The total frequency distribution of girls' scores is as follows:

Integral limits	Real limits	Mid-point	f	d	fd	fd ²
84-88	83.5-88.5	86	1	7	7	49
79-83	78.5-83.5	81	3	6	18	108
74-78	73.5-78.5	76	8	5	40	200
69-73	68.5-73.5	71	6	4	24	96
64-68	63.5-68.5	65	14	3	42	126
59-63	58.5-63.5	61	11	2	22	44
54-58	53.5-58.5	56	16	1	16	16
49-53	48.5-53.5	51	18	0	0	0
44-48	43.5-48.5	46	27	-1	-27	27
39-43	38.5-43.5	41	24	-2	-48	96
34-38	33.5-37.5	36	33	-3	-99	297
29-33	28.5-33.5	31	16	-4	-64	256
24-28	23.5-28.5	26	15	-5	-75	375
19-23	18.5-23.5	21	4	-6	-24	144
14-18	13.5-18.5	16	2	-7	-14	198
TOTALS			198	0-182	2,142	

5. The following measures of average, variability, reliability, and deviation were found for the girls:

a. arithmetic mean	46.40
b. median	44.00
c. range	72.00
d. quartile deviation	10.55

e. upper quartile 56.50

f. lower quartile 35.40

g. standard deviation 16.40

6. In order to aid in making comparisons the following chart is included:

	GIRLS	BOYS
a. arithmetic mean	46.40	47.75
b. median	44.00	47.90
c. range	72.00	73.00
d. quartile deviation	10.55	11.68
e. upper quartile	56.50	60.1
f. lower quartile	35.40	36.75
g. standard deviation	16.40	15.80

7. The following comparisons can be made from the above chart:

- a. The arithmetic means for boys and for girls did not differ by two (2) points.
- b. The difference between the median score for girls and the median score for boys did not exceed four (4) points.
- c. The difference between the range for the girls and the range for the boys was one (1) point.
- d. The difference between the quartile deviations for the boys and for the girls was not two (2) points.
- e. The difference between the upper quartile for the boys

and the upper quartile for the girls did not exceed four (4) points.

f. The difference between the lower quartile for the boys and the lower quartile for the girls did not exceed two (2) points.

g. The difference between the standard deviation for the boys and the standard deviation for the girls did not equal two (2) points.

8. From the above statistical data the writer now feels prepared to answer the major problem of this thesis.

a. Are junior high school boys more interested in biography than junior high school girls?

b. On the basis of "The Interest Inventory Test" given to over four hundred and fifty junior high school pupils, junior high school boys are NO more interested in biography than junior high school girls.

9. Conclusion to the major problem:

Difference in sex does NOT influence general interest in biography.

G. The test results as they relate to Problem II.- -

1. Problem II was stated as follows:

Do these interests vary in specific fields according to sex?

2. The following frequency distributions were found for each area:

a. Area I GIRLS

score	f	d	fd
10	0		
9	0		
8	9	3	27
7	17	2	34
6	16	1	16
5	29	0	0
4	31	-1	-31
3	38	-2	-76
2	33	-3	-99
1	18	-4	-72
0	7	-5	-35

ARITHMETIC MEAN 3.81

Area I BOYS

score	f	d	fd
10	2	5	10
9	13	4	52
8	28	3	84
7	43	2	86
6	35	1	35
5	50	0	0
4	33	-1	-33
3	25	-2	-50
2	19	-3	-57
1	9	-4	-36
0	4	-5	-20

ARITHMETIC MEAN 5.27

b. Area II GIRLS

score	f	d	fd
10	0		
9	7	4	28
8	11	3	33
7	26	2	52
6	21	1	21
5	35	0	0
4	38	-1	-38
3	31	-2	-62
2	24	-3	-72
1	5	-4	-20
0	0		

ARITHMETIC MEAN 4.71

AREA II BOYS

score	f	d	fd
10	2	5	10
9	14	4	56
8	31	3	93
7	40	2	80
6	39	1	39
5	37	0	0
4	40	-1	-40
3	30	-2	-60
2	17	-3	-51
1	16	-4	-64
0	5	-5	-25

ARITHMETIC MEAN 5.41

c. Area III GIRLS

score	f	d	fd
10	4	5	20
9	10	4	40
8	8	3	24
7	25	2	50
6	40	1	40
5	38	0	0
4	34	-1	-34
3	30	-2	-60
2	6	-3	-18

Area III BOYS

score	f	d	fd
10	0		
9	3	4	12
8	11	3	33
7	39	2	78
6	44	1	44
5	55		
4	47	-1	-47
3	36	-2	-72
2	16	-3	-48

c. cont.

score	f	d	fd
1	1	-4	-4
0	2	-5	-10

ARITHMETIC MEAN 5.24

score	f	d	fd
1	5	-4	-20
0	5	-5	-25

ARITHMETIC MEAN 4.83

d. Area IV GIRLS

score	f	d	fd
10	2	5	10
9	6	4	24
8	11	3	33
7	22	2	44
6	24	1	24
5	32	0	
4	39	-1	-39
3	34	-2	-68
2	19	-3	-57
1	6	-4	-24
0	3	-5	-15

ARITHMETIC MEAN 4.66

Area IV BOYS

score	f	d	fd
10	1	5	5
9	8	4	32
8	22	3	66
7	26	2	52
6	48	1	48
5	47	0	
4	40	-1	-40
3	36	-2	-72
2	19	-3	-57
1	11	-4	-44
0	3	-5	-15

ARITHMETIC MEAN 4.90

e. Area V GIRLS

score	f	d	fd
10	9	5	45
9	6	4	24
8	13	3	39
7	14	2	28
6	16	1	16
5	25	0	
4	33	-1	-33
3	35	-2	-70
2	31	-3	-93
1	12	-4	-48
0	4	-5	-20

ARITHMETIC MEAN 4.44

Area V BOYS

score	f	d	fd
10	16	5	80
9	30	4	120
8	25	3	75
7	35	2	70
6	26	1	26
5	31	0	
4	36	-1	-36
3	35	-2	-70
2	16	-3	-48
1	9	-4	-36
0	2	-5	-10

ARITHMETIC MEAN 5.66

Scores 1 2 3 4 5 6					
10	18	28	38	48	58
8	20	30	40	50	60
6	16	26	36	46	56

ARITHMETIC MEAN 5.50

Years 1A Scores				
10	18	28	38	48
8	20	30	40	50
6	16	26	36	46
4	14	24	34	44
2	12	22	32	42
0	10	20	30	40

ARITHMETIC MEAN 5.00

Years A Scores				
10	18	28	38	48
8	20	30	40	50
6	16	26	36	46
4	14	24	34	44
2	12	22	32	42
0	10	20	30	40

ARITHMETIC MEAN 5.00

Scores 1 2 3 4 5 6					
10	18	28	38	48	58
8	20	30	40	50	60
6	16	26	36	46	56

ARITHMETIC MEAN 5.50

Years 1A Scores				
10	18	28	38	48
8	20	30	40	50
6	16	26	36	46
4	14	24	34	44
2	12	22	32	42
0	10	20	30	40

ARITHMETIC MEAN 5.00

Years A Scores				
10	18	28	38	48
8	20	30	40	50
6	16	26	36	46
4	14	24	34	44
2	12	22	32	42
0	10	20	30	40

ARITHMETIC MEAN 5.00

f. Area VI GIRLS

score	f	d	fd
10	1	5	5
9	5	4	20
8	17	3	51
7	25	2	2
6	30	1	31
5	31	0	
4	29	-1	-29
3	35	-2	-70
2	18	-3	-54
1	5	-4	-20
0	2	-5	-10

ARITHMETIC MEAN 4.86

Area VI BOYS

score	f	d	fd
10	2	5	10
9	16	4	64
8	34	3	102
7	32	2	64
6	38	1	38
5	39	0	
4	42	-1	-42
3	38	-2	-76
2	21	-3	-63
1	7	-4	-28
0	2	-5	-10

ARITHMETIC MEAN 5.23

g. Area VII GIRLS

score	f	d	fd
10	0		
9	1	4	4
8	0	3	0
7	11	2	22
6	15	1	15
5	11	0	
4	39	-1	-39
3	38	-2	-76
2	51	-3	-153
1	27	-4	-108
0	5	-5	-25

ARITHMETIC MEAN 3.19

Area VII BOYS

score	f	d	fd
10	0		
9	2	4	8
8	4	3	12
7	6	2	12
6	10	1	10
5	22	0	
4	39	-1	-39
3	63	-2	-126
2	58	-3	-174
1	40	-4	-160
0	17	-5	-85

ARITHMETIC MEAN 2.92

h. Area VIII GIRLS

score	f	d	fd
10	6	5	30
9	21	4	84
8	28	3	84
7	44	2	88
6	31	1	31
5	29	0	
4	17	-1	-17
3	10	-2	-20
2	7	-3	-21
1	5	-4	-20
0	0		

ARITHMETIC MEAN 6.22

Area VIII BOYS

score	f	d	fd
10	2	5	10
9	11	4	44
8	44	3	132
7	57	2	114
6	64	1	64
5	31	0	
4	32	-1	-32
3	9	-2	-18
2	5	-3	-15
1	4	-4	-16
0	2	-5	-10

ARITHMETIC MEAN 6.05

i. Area IX GIRLS

score	f	d	fd
10	0		
9	4	4	16
8	3	3	9
7	10	2	20
6	19	1	19
5	26	0	
4	36	-1	-36
3	48	-2	-96
2	31	-3	-93
1	14	-4	-56
0	7	-5	-35

Area IX BOYS

score	f	d	fd
10	0		
9	0		
8	2	3	6
7	10	2	20
6	21	1	21
5	33	0	0
4	65	-1	-65
3	50	-2	-100
2	47	-3	-141
1	23	-4	-92
0	10	-5	-50

ARITHMETIC MEAN 4.23

ARITHMETIC MEAN 3.51

k. Area X GIRLS

score	f	d	fd
10	1	5	5
9	2	4	8
8	8	3	24
7	24	2	48
6	36	1	36
5	44	0	
4	36	-1	-36
3	26	-2	-52
2	12	-3	-36
1	9	-4	-36
0	0		

Area X BOYS

score	f	d	fd
10	0		
9	1	4	4
8	4	3	12
7	24	2	48
6	41	1	41
5	54	0	
4	53	-1	-53
3	36	-2	-72
2	32	-3	-96
1	14	-4	-56
0	2	-5	-10

ARITHMETIC MEAN 4.81

ARITHMETIC MEAN 4.30

3. A summary of the arithmetic means, complete with the differences

between the means for girls and for boys is as follows:

Area	Subject	Boys' mean	Girls' mean	Difference
Test I	sports	5.27	3.81	1.46
Test II	politics	5.41	4.71	.70
Test III	literature	4.83	5.24	.41
Test IV	science	4.90	4.66	.24
Test V	military	5.66	4.44	1.22
Test VI	radio	5.23	4.86	.37
Test VII	music	2.92	3.19	.27
Test VIII	comics	6.05	6.22	.17
Test IX	authors	3.51	4.23	.72
Test X	actors	4.30	4.81	.51

Years IX BOYS

	Score	I	II	III
10	0			
8	0			
6	8	5	3	6
5	3	10	5	20
3	2	10	5	21
2	1	10	5	0
1	0	33	0	0
-1	-1	42	-1	-2
-2	-2	50	-5	-100
-3	-3	42	-3	-105
-5	-5	42	-3	-115
-7	-7	33	-7	-125
-10	-10	2	-2	-20

Years IX GIRLS

	Score	I	II	III
10	0			
8	0			
6	8	3	3	6
5	3	10	5	20
3	2	10	5	21
2	1	10	5	0
1	0	56	0	0
-1	-1	36	-1	-36
-2	-2	48	-5	-68
-3	-3	35	-3	-65
-5	-5	35	-5	-65
-7	-7	20	-7	-70
-10	-10	2	-2	-20

ARITHMETIC MEAN 4.32

ARITHMETIC MEAN 4.35

Years X BOYS

	Score	I	II	III
10	0			
8	0			
6	8	1	3	15
5	3	8	5	18
3	2	8	5	18
2	1	10	5	15
1	0	25	0	0
-1	-1	23	-1	-23
-2	-2	38	-5	-35
-3	-3	38	-5	-35
-5	-5	35	-3	-38
-7	-7	35	-3	-38
-10	-10	5	-2	-10

Years X GIRLS

	Score	I	II	III
10	1	2	2	2
8	5	4	8	8
6	9	3	18	18
5	21	5	18	18
3	36	5	36	36
2	47	0	47	47
1	36	-1	-36	-36
-1	36	-1	-36	-36
-2	25	-5	-25	-25
-3	25	-5	-25	-25
-5	25	-3	-25	-25
-7	25	-4	-25	-25
-10	0	0	0	0

ARITHMETIC MEAN 4.30

ARITHMETIC MEAN 4.31

A summary of the arithmetic means compare with the differences between the scores for girls and boys is as follows:

Years	Sample	Boys, mean	Girls, mean	Differences
Leaf I	Scissors	3.31	2.51	1.80
Leaf II	Buttons	4.15	3.15	1.00
Leaf III	Triangles	4.58	2.58	2.00
Leaf IV	Squares	4.00	1.00	3.00
Leaf V	Multisets	4.98	2.98	2.00
Leaf VI	Isosceles	4.86	2.86	2.00
Leaf VII	Isosceles	4.23	2.23	2.00
Leaf VIII	Wedges	3.15	2.15	1.00
Leaf IX	Suppose	4.25	1.25	3.00
Leaf X	Scissors	4.81	1.81	3.00

4. From the above statistical data the writer now feels prepared to answer the first minor problem of the thesis:
- Do these interests vary in specific fields according to sex?
 - Yes, the interests do vary in specific fields according to sex.
 - A difference of 1.46 points, which we notice as the difference between the means for Test I, may be considered a significant difference when we remember that the greatest possible difference is ten (10) points.

5. Conclusion to the first minor problem:

- Do these interests vary in specific fields?
- In certain specific areas or fields these interests DO vary according to sex. Interest in sports and in military personnel appear to be more influenced by sex than any of the other fields.

H. Test results as they relate to Problem III-- -

1. Problem III was stated as follows:

Do these interests vary in specific fields within each sex?

2. Using the arithmetic means obtained from the frequency distributions listed from page twenty five (25) to page thirty (30) in this thesis, the means for both boys and for girls can be arranged in descending order to form the following pattern:

a. GIRLS MEANS ARRANGED IN DESCENDING ORDER

Area	Subject	Arithmetic mean
1. Test VIII	comics	6.22
2. Test III	literature	5.24
3. Test VI	radio	4.86
4. Test X	actors	4.81

Area	Subject	Arithmetic mean
5. Test II	politics	4.71
6. Test IV	science	4.66
7. Test V	military	4.44
8. Test IX	authors	4.23
9. Test I	sports	3.81
10. Test VII	music	3.19

The range of the arithmetic means found for the girls is 3.03.

b. BOYS' MEANS ARRANGED IN DESCENDING ORDER

Area	Subject	Arithmetic mean
1. Test VIII	comics	6.05
2. Test V	military	5.66
3. Test II	politics	5.41
4. Test I	sports	5.27
5. Test VI	radio	5.23
6. Test IV	science	4.90
7. Test III	literature	4.83
8. Test X	actors	4.30
9. Test IX	authors	3.51
10. Test VII	music	2.92

The range of the arithmetic means found for the boys is 3.13.

3. Remembering that the greatest possible range in arithmetic means would be ten (10) points, the range of 3.03 which was found for girls, and the range of 3.13 which was found for boys, was significant.

4. The conclusion to Problem III:

- a. Do these interests vary in specific fields within each sex?
- b. YES, these interests do vary in specific fields within each sex.

I. Test results as they relate to Problem IV.- -

1. Problem IV was stated as follows:

Is there a correlation between ability to achieve on the test and stated preference for the social studies?

2. When asked to check their preferences for academic subjects on the test cover, pupils who scored at or above the ninetieth (90) percentile made the following choices:

a. GIRLS AT or ABOVE THE 90th PERCENTILE

	subject	arithmetic	English	geography	history	science
choice						
1		3	10	0	6	1
2		2	4	1	5	8
3		3	0	9	3	5
TOTALS		8	14	10	14	14

b. BOYS AT or ABOVE THE 90th PERCENTILE

	subject	arithmetic	English	geography	history	science
choice						
1		9	0	0	9	8
2		2	3	4	7	10
3		3	8	5	6	4
TOTALS		14	11	9	22	22

Pupils who scored at or below the tenth (10) percentile made the following choices:

a. GIRLS AT or BELOW THE 10th PERCENTILE

	subject	arithmetic	English	geography	history	science
choice						
1		3	4	2	3	8
2		4	4	5	3	4
3		4	4	6	3	3
TOTALS		11	12	13	9	15

b. BOYS AT or BELOW THE 10th PERCENTILE

choice	subject	arithmetic	English	geography	history	science
1		9	1	4	4	8
2		5	0	9	5	7
3		3	5	6	7	5
TOTALS		17	6	19	16	20

4. From the above charts, the writer finds that twenty four (24) girls at or above the 90th percentile selected studies subjects among their first three choices. Twenty two (22) girls at or below the 10th percentile selected social studies subjects among their first three choices.
5. From the above charts, the writer finds that thirty one (31) boys at or above the 90th percentile selected social studies subjects among their first three choices. Thirty five (35) boys at or below the 10th percentile selected social studies subjects among their first three choices.
6. The conclusion to Problem IV:
- Is there a correlation between ability to achieve on the test and stated preferences for the social studies?
 - NO, correlation exists between ability to achieve on the test and stated preferences for the social studies.
- J. Test results as they relate to Problem V.
- Problem V was stated as follows: Do the stated preferences for any academic subjects relate to any area of success on the test?
 - Using the tables on pages thirty three and thirty four, the solution to Problem V as stated above is:

NO relationship exists between preferences for any academic subjects and areas of success on the test.

K. Conclusion to the chapter.-- -

The test results answered the major and minor problems of the thesis as follows:

1. Problem I -- Are junior high school boys more interested in biography than junior high school girls?

Finding -- Junior high school boys are NO more interested in biography than junior high school girls.

2. Problem II-- Do these interests vary in specific fields according to sex?

Finding -- YES, these interests do vary in specific fields according to sex.

3. Problem III-- Do these interests in specific fields vary within each sex?

Finding -- YES, these interests in specific fields do vary with each sex.

4. Problem IV-- Is there a correlation between ability to achieve on the test and stated preferences for the social studies?

Finding -- NO correlation exists between ability to achieve on the test and stated preferences for the social studies.

5. Problem V -- Do the stated preferences for any academic subjects account for any areas of success on the test?

Finding -- NO relationship exists between preferences
for any academic subjects and areas of success
on the test.

CHAPTER IV

CERTIFICATE BOND
FOR THE
AMOUNT OF

ONE HUNDRED

CHAPTER IV

INTERPRETATION, APPLICATION, and CONCLUSION

A. Interpretation.- -

The following chart showing the relative positions of the various tests in relation to sex, will help the writer and the reader to make a more accurate interpretation of the test results.

Area	Subject	Position for boys	Position for girls	Difference
Test I	sports	4	9	5
Test II	politics	3	5	2
Test III	literature	7	2	5
Test IV	science	6	6	0
Test V	military	2	7	5
Test VI	radio	5	3	2
Test VII	music	10	10	0
Test VIII	comics	1	1	0
Test IX	authors	9	8	1
Test X	actors	8	4	4

It is startling to discover that Test VIII which tested knowledge of the comics, maintained the highest arithmetic mean for both the boys and the girls. Yet the area of comics is never included in the curricula of the public schools.

It is equally startling to discover that Test VII, which tested knowledge of music, kept the lowest arithmetic mean for boys and for girls. Yet music is included or has been included as a course of study in the curricula of every pupil tested.

Since the group tested highest in a subject which is never included in the school curricula and test lowest in a subject which is or has been included in the school curricula of every pupil tested, the writer is forced to conclude that children often learn best that

- - no it's too much! A

which they learn in spite of our public school education rather than because of our public school education.

In Chapter I (page 4) we noted that interest produces learning. Apparently children are more interested in areas of learning which are NOT included in the curricula than in those areas of learning which ARE included in the curricula. One of the important problems to be considered under "Application" therefore will be that of finding ways to make our "in-school" material as interesting as the "out-of-school" material. In other words the teacher must, if he is going to maintain the most stimulating learning conditions, be just as interesting to his pupils as "Flash Gordon" and "Popeye". To do this and to still teach the subject matter properly, is a most challenging goal.

Only eight (8) pupils knew the composer of "America" on the completion test, and only one hundred thirteen (113) pupils knew the author of the "Star Spangled Banner". Yet the story of the conditions under which Francis Scott Key wrote the "Star Spangled Banner" is a tale bulging with excitement, thrills, and the spirit of adventure. Our application will then consider the problem of presenting material to the pupil in an interesting, exciting fashion.

Boys placed the military tests in second position, while the girls relegated military tests to the seventh 7th position. This wide difference between the two sexes supports the contention which any classroom teacher of the social studies would make--namely that the boys in the class are more interested in the battles of a war than are the girls. Our proximity to World War II and to atomic potentiality is too terrifying but to instill an interest in and an apprecia-

tion of our military leaders. These courageous men do furnish worthwhile models for our young lads to exemplify, but America is supposed to be a peace loving nation. It is pathetic to realize that our potential male citizens are so keenly aware of the world's great leaders in battle and so grossly unaware of the world's great musicians, authors and scientists. These men, many of whom have fought and worked for peace and tolerance, are also worthwhile models for our youth to follow. Their fights against disease, hatred and ignorance can thrill the hearts of our youth.

In spite of the high rating of the military area, one hundred and two (102) students listed Nathan Hale as the famous American traitor of the Revolution. It does not seem probable that over one hundred students did not know the correct meaning of the word "traitor". Therefore we are forced to conclude that the minds of our young charges do not distinctly separate our famous patriots from our infamous traitors. Over eighty (80) pupils did not know the name of the commander-in chief during the American Revolution.

Since one of the primary objectives of education is the development of a keen interest in things political,^{1/} it is a healthy sign to notice that politics and government find the third place on the chart for the boys and the fifth place for the girls. It is incongruous, however, to find that three hundred and fifty seven (357) pupils could correctly identify "Popeye", while only one hundred and two (102) pupils could correctly identify the governor of the state of Massachusetts.

^{1/}John J. Mahoney, For Us the Living. Harper and Brothers. New York, 1945, pp. 267-268.

Ten (10) pupils identified the mayor of the city of Boston as "Stalin". Eighty seven (87) students thought that Harry Truman opposed the late President Roosevelt in the last presidential election. This error points to a lack of knowledge concerning presidential succession. Although the scores in this area were not conspicuously low, many of the incorrect replies lead one to be wary when boasting of "the civic values" of social studies education, for we must remember that every child tested has been exposed to at least four (4) years of social studies training. In many instances, it would appear, the exposure was of negligible value. In this area the writer finds a challenge to the classroom teacher to make government and politics more interesting to his pupils.

Although both boys and girls are exposed to the same literature courses in school, the girls placed literature five steps ahead of the boys. Two questions can then be raised as a result of the findings: 1) Are girls more interested in literature as a school subject than boys? 2) Do girls read more books out-of-school than boys?

On the basis of a poll taken of two comparable groups composed of fifty seven (57) junior high school boys and fifty seven (57) junior high school girls, the following data were compiled using the following symbols to indicate the desired response:

1. -- excellent

2. -- good

3. -- fair

4. -- poor

The students were asked to evaluate their enjoyment of literature as the boys. The same group was checked to discover whether a difference

the effect - - .

Book - S

"This is - - ,

100g

a school subject.

A total of the replies is as follows:

Rating	Number of boys	Number of girls
1.	7	24
2.	19	16
3.	20	9
4.	11	8
TOTALS	57	57

This brief survey tends to indicate that girls seem to be more interested in literature as a school subject than are boys.

The same boys and girls were then asked to estimate how many books they read each month outside of school. The following replies were received:

Number of books read every month	Number of boys	Number of girls
5	0	2
4	0	6
3	5	12
2	13	17
1	21	8
0	18	12
TOTALS	57	57

Drawing conclusions from the two above polls, girls appeared to be more interested in literature as a school subject, and they also appeared to read more out of school than do the boys. These two reasons helped to explain why the girls scored five places higher in literature than did the boys.

A survey of fifty seven (57) boys and fifty seven (57) girls revealed no difference in the frequency of movie patronage. Yet the girls placed actors, as an area, four (4) places higher than did the boys. The same group was checked to discover whether a difference

could be found in the amount of reading done in movie magazines.

Using the following symbols to indicate the desired responses:

1. I read movie magazines regularly.
2. I often read movie magazines.
3. I seldom read movie magazines.
4. I never read movie magazines.

The following results were found:

Symbol	Girls	Boys
1	32	0
2	20	7
3	3	20
4	2	30
TOTALS	57	57

The writer then assumed that the difference noted above in the reading of movie magazines accounted for the superior knowledge of actors which the girls possessed on the test.

Science rated an identical sixth (6th) position for both sexes. Realizing that the names of scientists included in the test are subject matter not only in science courses but also in history courses, our academic progress is indeed questionable. When "Dagwood Bumstead" is more interesting to our youngsters than Thomas A. Edison, and when Benjamin Franklin cannot compete with "Little Orphan Annie" and her dog, "Sandy", the presentation of biographical material to our young students must indeed be dull.

The wide difference in the placement of sports supports the

expected, that boys are more interested in sports and athletes than are girls. This difference also supports the previous claim made in Chapter I on page three (3) that people learn best that in which they are most interested. Under section B of this chapter the application of this interest will be discussed.

The difference in placement for authors and for radio as areas was not significant enough to merit discussion.

B. Application-- -

1. The following six (6) points of application have been taken by the writer not only for this thesis, but for a classroom program:
 - a. An attempt should be made to stimulate greater interest, particularly on the part of girls, in politics and government.
 - b. Sports and athletes should find a greater place in the social studies courses.
 - c. More exciting and vital biographical stories should be a part of the general class material and they should be available for individual use.
 - d. Since the comics are so interesting to our boys and our girls, they, too, should have their place in the social studies classroom.
 - e. A wider use can be made of visual aids.
 - f. The social studies program must prove its civic values.
2. How to stimulate interest in politics and government-- -
 - a. Through the radio, through newspapers, and magazines, and through intimate biographical sketches our young pupils will become better acquainted with those men and women in whose

and especially the early in development stage when the embryo is small and the yolk is large. At this stage the embryo is very sensitive to external factors such as temperature, light, and humidity.

The first stage of development is the hatching of the egg. This occurs when the embryo begins to move and break through the eggshell.

The second stage of development is the larval stage.

The third stage of development is the pupal stage.

The fourth stage of development is the adult stage. This is the final stage of development.

The fifth stage of development is the death stage. This is the final stage of development.

The sixth stage of development is the death stage. This is the final stage of development.

The seventh stage of development is the death stage. This is the final stage of development.

The eighth stage of development is the death stage.

The ninth stage of development is the death stage. This is the final stage of development.

The tenth stage of development is the death stage.

The eleventh stage of development is the death stage. This is the final stage of development.

The twelfth stage of development is the death stage.

The thirteenth stage of development is the death stage. This is the final stage of development.

The fourteenth stage of development is the death stage. This is the final stage of development.

The fifteenth stage of development is the death stage. This is the final stage of development.

The sixteenth stage of development is the death stage. This is the final stage of development.

The seventeenth stage of development is the death stage. This is the final stage of development.

The eighteenth stage of development is the death stage. This is the final stage of development.

hands is entrusted the obligation of running the affairs of government. The radio, newspapers, and magazines should be used in the classroom and should be available to the pupils for individual study and for leisure time reading.

- b. Recording machines should be used in the classroom to acquaint the students with the voices of these leaders. Victrola records playing the voices of every president since Woodrow Wilson are available for use.
- c. Radio programs which occur when school is not in session should be regularly called to the attention of the pupils. A discussion of these programs might well follow on a succeeding day.
- d. Visual aids of all types should be more widely used. In addition to motion picture, photographs will help to stimulate interest in people prominent in all walks of life.
- e. Field trips to study local and state forms of government will invariably increase interest in the people who are running the affairs of government.

3. The place of sports and athletes in the social studies classroom--

- a. Through the various stages of American history men have become heroes because of their athletic prowess. These heroes are as much a part of "the American scene" as are the various cabinet officers. A given period in history would be more interesting, particularly to the boys, if they learned something not only of the athletic success, but also of the philanthropic deeds of the famous athletes of the period.
- b. Sports can be used by the classroom teacher in the teaching of

tolerance and mutual understanding. Every race, every creed, and every color has had its heroes. Admiration for them can help to create understanding in the place of bigotry. Again we can use not only their athletic success, but highlights on their parts as good citizens.

4. More exciting biographical stories for class use and for individual study. --

a. The teacher can easily compile good, exciting reading material for class to read and to use in discussions. Some of this material can be found in bound books, but much of it can be found in the daily newspaper, in paper booklets and in periodicals. A good biographical sketch of Francis Scott Key or of Nathan Hale would thrill the hearts of our boys and girls.

5. The wider use of visual aids. --

a. With proper planning all forms of visual aids can be purposefully used by the classroom teacher to stimulate interest in all phases of human endeavor. Some of the uses of visual aids have already been mentioned.

b. In addition music popular during different periods of history will add interest and zest to the school program.

c. Maps not only provide opportunities for learning but also furnish the student with the opportunity to create maps using his own talents for coloring and lettering.

6. Proving the civic values of social studies. --

a. Proving the civic values of the social studies is a difficult task, but in order to continue, the social studies must prove the worth

in terms of civic values.

b. Basic essentials must constitute the care of our curriculum.

The branches of our federal and state government, the ways of enacting laws, and the legal processes of election and succession are "tools" needed by every citizen if he is to properly execute his duties.

c. Conclusion. --

The following general conclusions can be made to this study:

1. Junior high school boys are NO more interested in biography than junior high school girls.
2. Interests in specific fields DO vary according to sex.
3. Interests in specific fields DO vary within each sex.
4. NO correlation exists between ability to achieve on the test and stated preferences for the social studies.
5. The stated preferences for academic subjects do NOT account for any areas of success on the test.
6. The interests shown on the test can be purposefully utilized by the classroom teacher to create greater interest and learning.
7. Many of the test results show a need for improved social studies teaching.

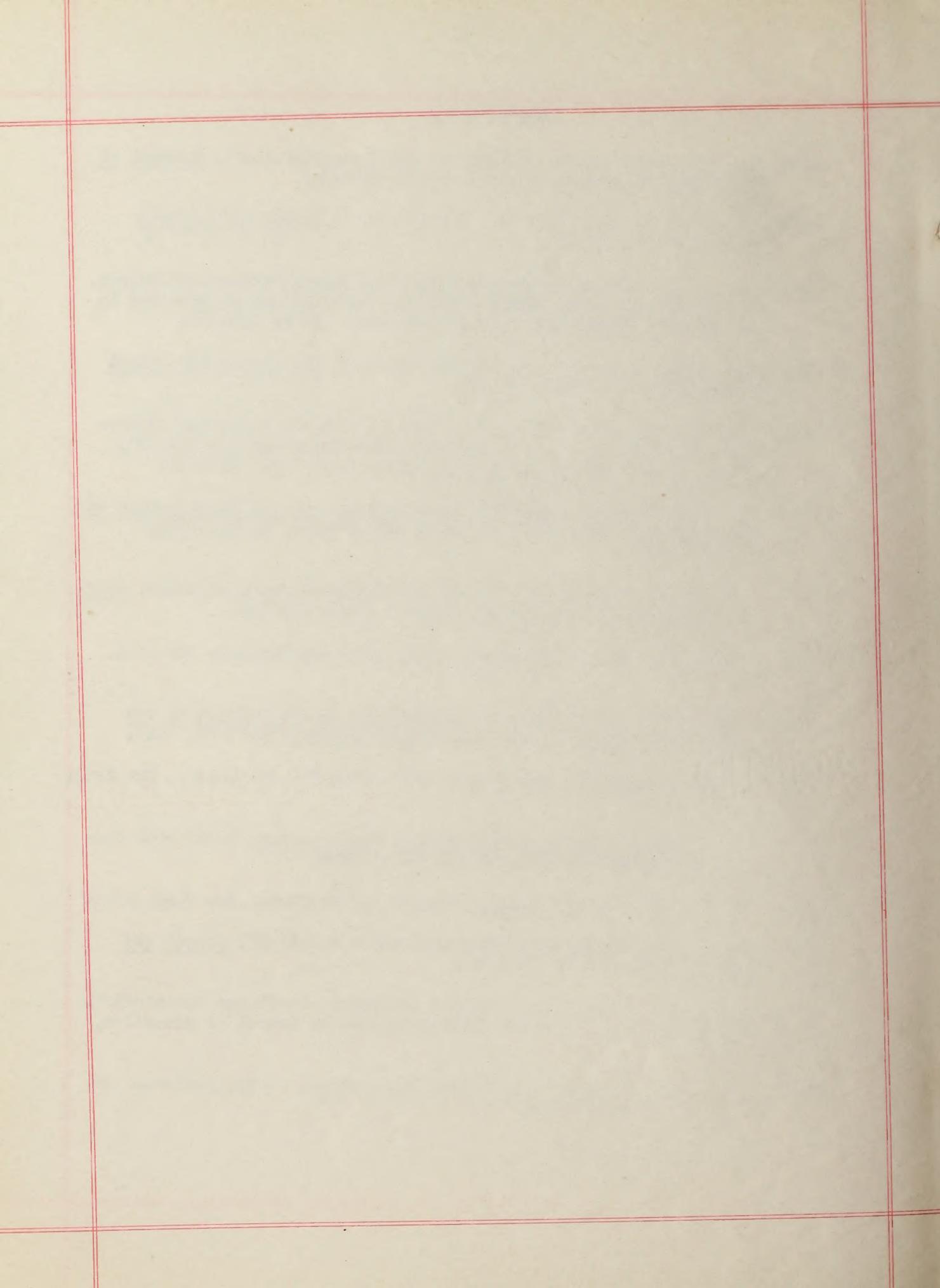
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